

Appl. No. 10/647,268
Amdt. Dated August 16, 2005
Reply to Office Action of May 24, 2005

REMARKS

Claims 1-9 and 11-15 are now in the case.

Claims 1-9 and 11-15 are presented for examination. Claim 10 has been canceled.

No claim has been allowed.

The Amendments.

The specification has been amended to identify the sequences of FIGS. 6 and 7 by SEQ ID NO in the Brief Description of the Drawings on page 8 of the specification as per the suggestion of the Examiner. The embedded hyperlinks directed to an Internet address have been deleted from paragraphs [0046] and [0047].

Independent Claim 1 has been limited to nucleic acid molecules corresponding to the specific sequence IDs originally set forth in the claims. Informalities in the language of Claims 3, 6 and 9 have been corrected in accordance with the suggestions of the Examiner. Withdrawn Claim 10 has been canceled.

The Rejection under 35 U.S.C. §112, Second Paragraph.

Claim 1, 3-9 and 11-15 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. This rejection is based on Applicants' failure to recite the specific hybridization and wash conditions (salt concentration, temperature,

Appl. No. 10/647,268
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time) required for Applicants' "high stringent" conditions. Withdrawal of this rejection is requested.

This issue is now deemed to be moot in view of the present amendment which renders the nucleic acid molecules of the claims to be defined independent of stringency conditions.

Claim 9 was also rejected as being indefinite in the recitation "sexually or asexually derived progeny". Insofar as this language has been removed from the claim in accordance with the Examiner's suggestion, this ground for rejection is deemed to be overcome.

The Rejection of Claims 6 and 9 under 35 U.S.C. §101.

Claims 6 and 9 stand rejected under 35 U.S.C. §101, as being directed to non-statutory subject matter on the grounds that it is unclear whether the claimed seed or progeny would be distinguishable from seed or progeny that would occur in nature. The Examiner's point on this matter is well-taken. Insofar as Applicants' have inserted the term "transgenic" into each of these claims as recommended by the Examiner, this rejection is believed to be overcome and its withdrawn is hereby solicited.

The Rejection of Claims 1, 3-9 and 11-15 under 35 U.S.C. §112, First Paragraph (Enablement).

Claims 1, 3-9 and 11-15 stand rejected under 35 U.S.C. §112, first paragraph, because the specification, while being enabling for the isolated nucleic acid molecule

Appl. No. 10/647,268
Amdt. Dated August 16, 2005
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encoding SEQ ID NO:2, 4, or 10, a plant/cell/seed/progeny transformed with said nucleic acid molecule, and a method for conferring resistance against *Solanum bulbocastanum* late blight disease, does not reasonably provide enablement for any of the following: a nucleic acid molecule having more than 90% sequence identity to SEQ ID NO:1 from nucleotides 52 to 3018 and a hybridizing sequence thereof; a nucleic acid molecule encoding a polypeptide having more than 90% sequence identity to SEQ ID NO:2, 4, or 10; and a method that employs said nucleic acid molecules for production of fungal resistant transgenic plants. The Examiner has presented a very lucid and detailed rationale for this rejection. In an effort to advance the prosecution of this case, Applicants have now amended the claims to remove the sequence identity limitations and the hybridization limitation, and they have now limited the claims to nucleic acid molecules as represented by specific SEQ ID NOs. The Examiner acknowledges on pages 8 and 9 of the Office Action that Applicants present a working example in the specification drawn the use of the nucleic acid molecule of SEQ ID NO:1, 3, or 9 which encode polypeptide SEQ ID NO:2, 4, or 10, respectively, for conferring resistance against *P. infestans*. Accordingly, Applicants submit that the claims are fully enabled for the subject matter to which they are now drawn and are no longer subject to this ground of rejection. Withdrawal thereof is hereby requested.

Appl. No. 10/647,268
Amdt. Dated August 16, 2005
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**The Rejection of Claims 1, 3-9 and 11-15 under 35 U.S.C. §112, First Paragraph
(Written Description).**

Claims 1, 3-9 and 11-15 stand rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. The Examiner holds that the claim(s) contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. The reasons for this rejection, as carefully outlined by the Examiner, are commensurate with those providing the basis for the rejection on lack of enablement discussed above. Given that the claims, as now amended, are no longer drawn to molecular entities other those described by SEQ ID NO, the claims now presented are deemed to be in full compliance with the written description requirement, and withdrawal of the rejection is hereby solicited.

The Rejection of Claims 1, 3-9 and 11-15 under 35 U.S.C. §102(b).

Claims 1, 3-9 and 11-15 stand rejected under 35 U.S.C. §102(b) as being anticipated by Fluhr et al (U.S. Pat. No. 6,100,449). The Examiner holds that Fluhr et al teach an isolated gene from Fusarium resistance locus in tomato encoding disease resistance polypeptides comprising LRR regions, a vector comprising the gene, transformation of plants, as well as transformed plants/cell/seed/progeny including members of the Solanaceae family. The Examiner maintains that resistance to

Appl. No. 10/647,268
Amdt. Dated August 16, 2005
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Phytophthora infestans and other fungi would be an inherent property of the transgenic plant expressing LRR containing polypeptides. The Examiner further holds that, given the broad interpretation of high stringency conditions, the claimed nucleic acid molecules would encompass the gene disclosed by Fluhr et al. Withdrawal of this rejection is requested for the following reasons.

Fluhr et al. fails to teach or suggest an isolated nucleic acid molecule coinciding with any one of SEQ ID NOs:1, 3, or 9, or encoding a polypeptide coinciding with any one of SEQ ID NO:2, 4 or 10. Moreover, given that the plant disease addressed by Fluhr is *Fusarium* rather than the claimed *Phytophthora infestans*, the reference clearly fails to either anticipate or render obvious the claimed invention.

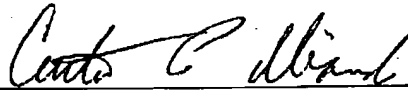
Summary.

Applicants have made every attempt to amend the specification and claims in accordance with the several suggestions made by the Examiner for the purpose of putting the case in better form for allowance. Independent Claim 1 has been amended to limit the scope thereof to nucleic acid molecules that are clearly enabled by SEQ ID NO and for which a complete written description is provided in the disclosure. Having so limited the claims, Applicants believe that they are free of the applied art.

Accordingly, Claims 1-9 and 11-15 are deemed to be in condition for allowance, and a favorable action thereon is earnestly solicited. **If the Examiner believes that there are any issues that need to be addressed before allowance of the application, she is invited to call the undersigned at 309-681-6512.**

Appl. No. 10/647,268
Amdt. Dated August 16, 2005
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Respectfully submitted,



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